REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1, 4-30, 32-33 and 39 are pending in this application.

Priority Under 35 U.S.C. §119:

The Office Action again failed to acknowledge Applicant's claim for foreign priority under 35 U.S.C. §119 and receipt of certified copies of priority documents. Applicant therefore respectfully requests that the next Office Action indicate acknowledgement of Applicant's claim for foreign priority under 35 U.S.C. §119 and receipt of certified copies of the priority documents. The Notification of Acceptance of Application Under 35 U.S.C. §371 (Form PCT/DO/EO/903) acknowledges receipt of the priority documents.

Approval of Formal Drawings:

A Drawing Change Authorization Request was filed on February 24, 2003. A new set of formal drawings including the proposed drawing corrections of the Drawing Change Authorization Request was also filed on February 24, 2003. Applicant respectfully requests that the proposed drawing corrections and the set of formal drawings be approved.

Rejection Under 35 U.S.C. §103:

Claims 1, 4-33, 37 and 39 were rejected under 35 U.S.C. §103 over Takeuchi (U.S. '456) in view of Dent (U.S. '878). Applicant respectfully traverses this rejection with respect to still pending claims 1, 4-30, 32-33 and 39.

In order to establish a prima facie case of obviousness, all of the claimed limitations must be taught or suggested by the prior art. Applicant respectfully submits that the combination of Takeuchi and Dent fails to teach or suggest all of the claimed limitations. For example, Applicant submits that the combination fails to teach or suggest determining a class of service for packets in a packet router, scheduling packets differently depending on the respective class of service, and policing the class of service levels of packets at a location remote from the router to determine the eligibility of a packet for a respective class of service as required by independent claim 26. The Office Action states "Takeuchi discloses...data transmission through pluralities of networks which involve routing (Fig 3)...." (See page 4 of the Office Action). Even assuming *arguendo* that this is true, there is no teaching in Takeuchi and/or Dent of a router determining a class of service of packets and policing the class of service levels of packets at a location remote from the router as required by independent claim 26.

Independent claim 27 requires calculating an edge price for data transmission. Applicant submits that neither Takeuchi nor Dent discloses this claimed feature. The Office Action apparently alleges that Figs. 7-8 and/or Figs. 11-16 of Takeuchi discloses edge price determination. (See page 4 of the Office Action). Applicant respectfully disagrees. For example, Figs. 7-8 merely disclose determining a charging unit price, not an edge price. If the Office Action

maintains the rejection of claim 27 over Takeuchi and Dent, Applicant respectfully requests that the next Office Action indicate which specific parts of Figs. 7-8 and 11-16 disclose edge price determination as required by independent claim 27.

Independent claim 29 requires, inter alia, measuring a quantity of data flowing from an originating customer into the network and a quantity of data flowing out of the network to a destination customer. Applicant respectfully submits that the combination of Takeuchi and Dent fails to teach or suggest this claimed feature. The Office Action does not even appear to specifically allege that Takeuchi and Dent teaches or suggests this feature.

Independent claim 1 requires sampling the usage of network resources by an individual terminal and comparing a measurement of this sampled usage with measurements or calculations made by or at the individual terminal. A goal of the invention of claim 1 is to try to minimize the amount of traffic flowing through a network which is purely for the purpose of measuring network usage by users so that they can be billed on the basis of their usage. The invention of claim 1 resolves this technical problem by having at least some of the work being performed by each terminal. Unfortunately, this solution is susceptible to a user interfering with the measurements taken at their own respective terminal in an attempt to defraud the network operator. The invention of claim 1 avoids this problem by sampling the actual network usage of the individual terminal and

checking that it does indeed correspond to the usage and/or cost reported by the corresponding terminal.

Neither Takeuchi nor Dent discloses performing the measurement of network usage for the purposes of billing users by a network operator, except in the conventional centralized manner. Neither of these references therefore teaches or suggests performing sampling of the network usage of an individual terminal and comparing this with measurements of usage and/or cost reported by the corresponding terminal.

The Office Action alleges that "Comparison methods taught by Dent against known critical values provide a means of verification monitoring (col 2 line 44 - col 3 line 15)." Applicant respectfully disagrees with this allegation. The above cited portion of Dent discloses comparing measured communication units used by a communications terminal to a critical value to generate an indication of economic efficiency for the user not as a "means of verification monitoring," as alleged. For example, a warning icon or audible warning may be provided during a call as an indication of economic efficiency to allow the user to end a call session and avoid excessive charges. (See, e.g., col. 7, lines 17-27 of Dent).

The Office Action also alleges that "Dent further teaches sampling the usage of network resources by a terminal and comparing a measure of this sampled usage with measurements made by a terminal (Abstract)(Fig 7/710/720/730)(Fig 8)(Fig 9)(col 1 line 64-col 3 line 45)." Applicant respectfully

disagrees with this allegation. That is, none of these identified portions of Dent discloses or even suggests sampling the usage of network resources by an individual terminal and comparing a measurement of this sampled usage with measurements or calculations made by or at the individual terminal as required by independent claim 1.

Before examining each of these sections in detail, Applicant first notes that Dent primarily describes assisting a user of a mobile telephone to understand what charges he/she incurring on his/her telephone and to provide some mechanisms for preventing undesired costs incurred by overuse of his/her telephone. The system disclosed by Dent is therefore "user-centric" (i.e., the benefits provided by Dent are selected primarily to the benefit of the user of the telephone). In contrast, the invention of claim 1 is "network-centric" (i.e., the benefits provided by the present invention are at least primarily directed to the benefit of a network operator rather than an individual terminal user).

The abstract of Dent discloses storing a critical value of a tariff in a smart card and using this critical value to provide visual or audio indication of the determined economic efficiency to a user of the terminal. The abstract further discloses the display of first and second icons and measures for controlling usage beyond "when the measured communication units exceed the stored critical values." There is absolutely no discussion or suggestion of sampling, or measuring only the portion of network resources used by the terminal. The

abstract discloses that the terminal measures in its entirety the usage by the terminal of the network resources in a conventional manner. Since the abstract of Dent does not disclose sampling usage of the network resources by the terminal, it further does not disclose comparing the sampled usage with measured data.

Fig. 7 illustrates the overall method proposed in Dent. At step 710, a critical value is stored in the terminal. The critical value is a point at which the tariff changes (e.g., the point at which the "inclusive minutes" in a particular mobile phone tariff have been consumed). In step S720, the terminal measures the communications units used by the terminal. This involves measuring the communications units in their entirety and not therefore performing any sampling.

In step 730, the economic efficiency of the operation of the terminal is determined based on the measured communications units consumed and the stored critical value. There is no precise explanation of how this is done in relation to Fig. 7. However, Dent describes how this might be done in relation to Fig. 9 (see col. 7, lines 39-62). Col. 7, lines 39-62 describes calculating a projected number of communications units used during a complete billing cycle based on the number of units used thus far (measured in their entirety) based on the average rate of consumption of communications units to the current point in time. This projected usage is then compared with the "critical value" previously stored and if the comparison indicates that this critical number is projected to be exceeded by the end of the billing period, then the economic efficiency is determined to be in a

non-efficient category, otherwise it is determined to be in an efficient category. This process, however, does not involve performing any sampling. All of the communications units which are consumed by the user are measured in their entirety. This information is then used to form a projected usage. This is clearly very different from sampling usage of the terminal by measuring a portion only of the units consumed by the terminal.

In step 740, measures to control usage of communications units are initiated based on determined economic efficiency (i.e., in the event that the projected usage is such that it has been determined that the usage currently falls in a non-efficient category). Again, neither the terminal nor any other element is performing sampling of the consumption by the terminal of communications units.

The above discussion of Fig. 7 shows that there is no sampling being performed at any time. Rather, the terminal measures all usage by the terminal of communication units. Figs. 8 and 9 are similar in their essentials to Fig. 7 except that they describe slightly more detailed methods of performing the method of the invention described in Dent with the added sophistication of having two critical values stored and (in Fig. 9) of the added sophistication of calculating a projected efficiency based on an average rate of consumption thus far in the billing cycle. Again, there is no disclosure of performing sampling as claimed. Also, there would be no point in the terminal performing sampling of the communications

units used as it measures this in its entirety and can therefore use the full information available to it for performing its projections etc.

Turning now therefore to col. 1, line 64 to col. 3, line 45, this portion again sets out the basic method of the invention described in Dent. This method involves storing one or more critical values of the consumption of communications units in the terminal, measuring (in its entirety) the actual consumption of communications units by the terminal and performing an operation if the comparison of the stored critical value of consumption with the measured actual consumption indicates that the terminal is being used inefficiently (or is projected to be used inefficiently) given the actual measured usage thus far in the billing cycle. There is no discussion anywhere of sampling being performed either by the terminal itself or any other entity.

Accordingly, Applicant submits that claims 1, 4-30, 32-33 and 39 are not "obvious" over Takeuchi and Dent and respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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